

5'	9	18	27	36	45	54											
A	AGG	GGC	GCT	GCC	GCG	AGC	CTC	CGG	GCC	TCA	GGG	TGT	TCC	GGG	GAG	CGG	CGC
	63	72	81	90	99	108											
CCC	GGG	TCT	CTG	GGC	CCA	CCC	GGC	CCC	GGC	GTC	CTC	CGA	GAG	TGG	GGG	CTG	CGC
	117	126	135	144	153	162											
CCG	CGG	GGT	CAG	ACA	CCT	GTT	CGG	CCC	GGC	CCG	GGC	TGG	TCG	CCG	GGG	GCC	AGG
	171	180	189	198	207	216											
ATG	AAA	GTG	ACC	GTG	TGC	TTC	GGC	AGG	ACG	GGC	ATC	GTG	GTG	CCC	TGC	AAG	GAG
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M	K	V	T	V	C	F	G	R	T	G	I	V	V	P	C	K	E
	225	234	243	252	261	270											
GGC	CAG	CTG	CGC	GTC	GGC	GAG	CTC	ACC	CAG	CAG	GCG	CTG	CAG	CGG	TAC	CTG	AAG
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
G	Q	L	R	V	G	E	L	T	Q	Q	A	L	Q	R	Y	L	K
	279	288	297	306	315	324											
ACC	CGG	GAG	AAG	GGT	CCT	GGT	TAC	TGG	GTG	AAG	ATT	CAT	CAC	TTA	GAA	TAT	ACA
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
T	R	E	K	G	P	G	Y	W	V	K	I	H	H	L	E	Y	T

FIGURE 1A

333	GAT GGA GGA ATC CTG GAT CCA GAT GAT GTC TTG GCA GAT GTT GTT GAA GAT AAA	342	351	360	369	378
---	---	---	---	---	---	---
D G G I L D P D D V L A D V E D K						
387	GAC AAG CTG ATT GCT GTG TTT GAA GAA CAA GAA CCA CTC CAC AAG ATT GAG AGC	396	405	414	423	432
---	---	---	---	---	---	---
D K L I A V F E E Q E P L H K I E S						
441	CCC AGT GGA AAC CCT GCA GAT CGG CAG AGC CCA GAT GCT TTT GAG ACA GAA GTG	450	459	468	477	486
---	---	---	---	---	---	---
P S G N P A D R Q S P D A F E T E V						
495	GCC GCC CAA CTG GCT GCA TTT AAG CCA ATT GGT GGG GAG ATT GAA GTA ACC CCT	504	513	522	531	540
---	---	---	---	---	---	---
A A Q L A A F K P I G G E I E V T P						
549	TCT GCT CTA AAA CTA GGC ACT CCA CTG CTG CTG GTG AGG AGA AGC AGT GAC CCA GTG	558	567	576	585	594
---	---	---	---	---	---	---
S A L K L G T P L L V R R S S D P V						

FIGURE 1B

CCA	GGC	CCA	CCT	GCT	GAT	ACC	CAG	CCA	AGC	GCT	TCA	CAC	CCT	GGT	GGC	CAG	AGT
603	612	621	630	639	648												
P	G	P	P	A	D	T	Q	P	S	A	S	H	P	G	G	Q	S
CTG	AAA	CTG	GTT	GTT	CCA	GAT	TCC	ACG	CAG	AAC	TTG	GAA	GAC	AGA	GAA	GTT	TTG
657	666	675	684	693	702												
L	K	L	V	V	P	D	S	T	Q	N	L	E	D	R	E	V	L
AAT	GGT	GTA	CAG	ACA	GAA	CTA	CTA	ACT	TCG	CCA	AGA	ACT	AAG	GAC	ACA	TTG	AGT
711	720	729	738	747	756												
N	G	V	Q	T	E	L	L	T	S	P	R	T	K	D	T	L	S
GAT	ATG	ACA	AGA	ACA	GTG	GAG	ATT	TCT	GGG	GAA	GGA	GGC	CCA	TTG	GGA	ATA	CAT
765	774	783	792	801	810												
D	M	T	R	T	V	E	I	S	G	E	G	G	P	L	G	I	H
GTA	GTG	CCC	TTC	TTT	TCA	TCT	CTG	AGT	GGA	AGG	ATT	CTA	GGA	CTC	TTC	ATC	CGA
819	828	837	846	855	864												
V	V	P	F	F	S	S	L	S	G	R	I	L	G	L	F	I	R

873	882	891	900	909	918
GGC ATT GAA GAC AAC AGC AGG TCC AAG CGG GAG GGA CTA TTT CAC GAA AAT GAA					
---	---	---	---	---	---
G I E D N S R S K R E G L F H E N E					
927	936	945	954	963	972
TGT ATT GTA AAA ATC AAC AAT GTG GAT CTC GTA GAC AAA ACC TTT GCT CAG GCT					
---	---	---	---	---	---
C I V K I N N V D L V D K T F A Q A					
981	990	999	1008	1017	1026
CAA GAT GTC TTC CGC CAG GCA ATG AAA TCT CCA AGT GTG CTC CTC CAC GTG CTT					
---	---	---	---	---	---
Q D V F R Q A M K S P S V L L H V L					
1035	1044	1053	1062	1071	1080
CCT CCA CAA AAC CGT GAA CAG TAT GAA AAG TCA GTC ATT GGC TCT CTT AAC ATT					
---	---	---	---	---	---
P P Q N R E Q Y E K S V I G S L N I					
1089	1098	1107	1116	1125	1134
TTT GGT AAT AAT GAT GGC GTT TTG AAA ACC AAA GTG CCG CCT CCT GTC CAT GGA					
---	---	---	---	---	---
F G N N D G V L K T K V P P P V H G					

FIGURE 1D

1143	1152	1161	1170	1179	1188
AAA TCG GGA CTA AAG ACA GCA AAT CTC ACA GGA ACC GAT AGT CCT GAA ACA GAT					
K S G L K T A N L T G T D S P E T D					
1197	1206	1215	1224	1233	1242
GCA TCA GCT TCC CTG CAA CAA AAC AAG AGT CCC CGA GTA CCA AGG CTG GGA GGA					
A S A S L Q Q N K S P R V P R L G G					
1251	1260	1269	1278	1287	1296
AAA CCA TCC TCT CCC TCA CTC TCG CCT CTC ATG GGA TTT GGC AGC AAT AAA AAT					
K P S S P S L S P L M G F G S N K N					
1305	1314	1323	1332	1341	1350
GCA AAG AAA ATT AAG ATT GAC CTA AAG AAA GGC CCT GAA GGA CTT GGT TTC ACT					
A K K I K I D L K K K G P E G L G F T					
1359	1368	1377	1386	1395	1404
GTG GTT ACC AGA GAC TCT TCC ATA CAT GGT CCC GGT CCC ATT TTT GTA AAA AAC					
V V T R D S S I H G P G P I F V K N					

FIGURE 1E

1413	1422	1431	1440	1449	1458
ATT TTA CCA AAG GGA GCA ATA AAA GAT GGC CGC CTA CAA TCA GGG GAC AGA					
---	---	---	---	---	---
I L P K G A A I K D G R L Q S G D R					
1467	1476	1485	1494	1503	1512
ATT TTG GAG GTA AAT GGG AGA GAT GTC ACC GGA CGA ACC CAG GAA GAG CTT GTG					
---	---	---	---	---	---
I L E V N G R D V T G R T Q E L V					
1521	1530	1539	1548	1557	1566
GCC ATG CTC AGG AGC ACC AAG CAG GGG GAG ACA GCA TCG CTG GTC ATT GCC CGC					
---	---	---	---	---	---
A M L R S T K Q G E T A S L V I A R					
1575	1584	1593	1602	1611	1620
CAA GAA GGA CAT TTT CTG CCC CGA GAG TTG AAA GGA GAA CCT GAC TGC TGT GCA					
---	---	---	---	---	---
Q E G H F L P R E L K G E P D C C A					
1629	1638	1647	1656	1665	1674
CTC TCT CTG GAG ACA AGC GAG CAG CTC ACC TTT GAG ATC CCC CTG AAT GAT TCA					
---	---	---	---	---	---
L S L E T S E Q L T F E I P L N D S					

FIGURE 1F

FIGURE 1G

[illegible]

1953	1962	1971	1980	1989	1998												
CCA	ATG	GAG	GAT	CCT	GCA	GAG	TGT	GGG	GCA	TTT	TCC	AAG	CCA	TGC	TTT	GAG	AAC
P	M	E	D	P	A	E	C	G	A	F	S	K	P	C	F	E	N
2007	2016	2025	2034	2043	2052												
TGT	CAA	AAT	GCT	GTA	ACC	ACC	TCT	AGG	CGA	AAT	GAT	AAT	AGT	ATC	CTG	CAT	CCA
C	Q	N	A	V	T	T	S	R	R	N	D	N	S	I	L	H	P
2061	2070	2079	2088	2097	2106												
CTT	GGC	ACT	TGC	AGT	CCA	CAA	GAC	AAA	CAG	AAA	GGT	CTA	TTG	CTG	CCC	AAT	GAC
L	G	T	C	S	P	Q	D	K	Q	K	G	L	L	L	P	N	D
2115	2124	2133	2142	2151	2160												
GGA	TGG	GCC	GAG	AGT	GAA	GTT	CCA	CCT	TCT	CCA	ACA	CCA	CAT	TCT	GCT	CTG	GGA
G	W	A	E	S	E	V	P	P	S	P	T	P	H	S	A	L	G
2169	2178	2187	2196	2205	2214												
TTG	GGC	CTC	GAA	GAT	TAC	AGC	CAC	AGC	TCT	GGG	GTG	GAT	TCA	GCA	GTA	TAT	TTT
L	G	L	E	D	Y	S	H	S	S	G	V	D	S	A	V	Y	F

FIGURE 1H

2223	2232	2241	2250	2259	2268
CCA GAT CAG CAC ATC AAC TTC AGA TCT GTG ACA CCG GCC AGG CAG CCT GAA TCA					
---	---	---	---	---	---
P D Q H I N F R S V T P A R Q P E S					
2277	2286	2295	2304	2313	2322
ATT AAT TTG AAA GCC TCG AAG AGC ATG GAC CTT GTG CCA GAT GAA AGC AAG GTT					
---	---	---	---	---	---
I N L K A S K S M D L V P D E S K V					
2331	2340	2349	2358	2367	2376
CAC TCA TTG GCT GGA CAA AAA TCG GAA TCT CCA AGC AAA GAT TTT GGT CCA ACT					
---	---	---	---	---	---
H S L A G Q K S E S P S K D F G P T					
2385	2394	2403	2412	2421	2430
CTG GGT TTG AAA AAG TCC AGC TCC TTG GAG AGT CTG CAG ACT GCA GTG GCC GAG					
---	---	---	---	---	---
L G L K K S S S L E S L Q T A V A E					
2439	2448	2457	2466	2475	2484
GTC AGG AAG AAT GAC CTT CCC TTT CAC AGG CCC CGG CCG CAC ATG GTT CGA GGC					
---	---	---	---	---	---
V R K N D L P F H R P P R P H M V R G					

FIGURE II

2493	2502	2511	2520	2529	2538
CGA GGC TGC AAT GAG AGC TTT AGA GCA GCC ATT GAC AAA TCC TAC GAT GGA CCT					
---	---	---	---	---	---
R G C N E S F R A A I D K S Y D G P					
2547	2556	2565	2574	2583	2592
GAA GAA ATA GAA GCT GAC GGT CTG TCT GAT AAG AGC TCT CAC TCT GGC CAA GGA					
---	---	---	---	---	---
E E I E A D G L S D K S S H S G Q G					
2601	2610	2619	2628	2637	2646
GCT CTG AAT TGT GAG TCT GCC CCT CAG GGG AAT TCG GAG CTA GAG GAC ATG GAA					
---	---	---	---	---	---
A L N C E S A P Q G N S E L E D M E					
2655	2664	2673	2682	2691	2700
AAT AAA GCC AGG AAA GTC AAA AAA ACG AAA GAG AAG GAG AAA AAG GAA AAG					
---	---	---	---	---	---
N K A R K V K K T K E K E K K E K					
2709	2718	2727	2736	2745	2754
GGC AAA TTG AAA GTC AAG GAG AAA AAG CAG AAA GAG GAG AAT GAA GAT CCA GAA					
---	---	---	---	---	---
G K L K V K E K K R K E E N E D P E					

FIGURE 1J

2763	2772	2781	2790	2799	2808
AGG AAA ATA AAG AAG AAG GGC TTC GGC GCC ATG CTG AGG TAT GGG CCT GCT TTG					
---	---	---	---	---	---
R K I K K K G G F G A M L R Y G P A L					
2817	2826	2835	2844	2853	2862
AAG GCA AAG TTG GTT CTC ATT TTG TCT CTC CTG AAA AAA GCG CAC GCT TTT CCT					
---	---	---	---	---	---
K A K L V L I L S L L K K A H A F P					
2871	2880	2889	2898	2907	2916
CGT CTT CAG CCA AAT GCA TAC GGC TCT CAA TTC TGT GCT CGT TCT CTT TCT GCA					
---	---	---	---	---	---
R L Q P N A Y G S Q F C A R S L S A					
2925	2934	2943	2952	2961	2970
GAG GCA GAG GAG CTT TTT GGG GAA AGT TAC AGT GAT GAC AGG ACA CTG TCT TAA 3'					
---	---	---	---	---	---
E A E E L F G G E S S Y S D D R T L S					

FIGURE 1K

5'	ATG	AAA	GTG	ACC	GTG	TTC	GGA	CGG	ACC	CGG	GTG	GTC	GTG	CCG	TGC	GGG	GAC	
	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
	M	K	V	T	V	C	F	G	R	T	R	V	V	P	C	G	D	
	GGC	CAC	ATG	AAA	GTT	TTC	AGC	CTC	ATC	CAG	CAG	GCG	GTG	ACC	CGC	TAC	CGG	AAG
	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
	G	H	M	K	V	F	S	L	I	Q	Q	A	V	T	R	Y	R	K
	GCC	ATC	GCC	AAG	GAT	CCA	AAC	TAC	TGG	ATA	CAG	GTG	CAT	CGC	TTG	GAA	CAT	GGA
	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
	A	I	A	K	D	P	N	Y	W	I	Q	V	H	R	L	E	H	G
	GAT	GGA	GGA	ATA	CTA	GAC	CTT	GAT	GAC	ATT	CTT	TGT	GAT	GTA	GCA	GAC	GAT	AAA
	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
	D	G	G	I	L	D	L	D	D	I	L	C	D	V	A	D	D	K
	GAC	AGA	CTG	GTA	GCA	GTG	TTT	GAT	GAG	CAG	GAT	CCA	CAT	CAC	GGA	GGT	GAT	GGC
	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
	D	R	L	V	A	V	F	D	E	Q	D	P	H	H	G	G	D	G

FIGURE 2A

279	288	297	306	315	324
ACC AGT GCC AGT TCC ACG GGT ACC CAG AGC CCA GAG ATA TTT GGT AGT GAG CTT					
---	---	---	---	---	---
T S A S S T G T Q S P E I F G S E L					
333	342	351	360	369	378
GGC ACC AAC AAT GTC TCA GCC TTT CAG CCT TAC CAA GCA ACA AGT GAA ATT GAG					
---	---	---	---	---	---
G T N N V S A F Q P Y Q A T S E I E					
387	396	405	414	423	432
GTC ACA CCT TCA GTC CTT CGA GCA AAT ATG CCT CTT CAT GTT CGA CGC AGT AGT					
---	---	---	---	---	---
V T P S V L R A N M P L H V R S S					
441	450	459	468	477	486
GAC CCA GCT CTA ATT GGC CTC TCC ACT TCT GTC AGT GAT AGT AAT TTT TCC TCT					
---	---	---	---	---	---
D P A L I G L S T S V S D S N F S S					
495	504	513	522	531	540
GAA GAG CCT TCA AGG AAA AAT CCC ACA CGC TGG TCA ACA ACA GCT GGC TTC CTC					
---	---	---	---	---	---
E E P S R K N P T R W S T T A G F L					

FIGURE 2B

549	AAG CAG AAC ACT GCT GGG AGT CCT AAA ACC TGC GAC AGG AAG AAA GAT GAA AAC	558	567	576	585	594
---	---	---	---	---	---	---
K Q N T A G S P K T C D R K K D E N						
603	TAC AGA AGC CTC CCG CGG GAT ACT AGT AAC TGG TCT AAC CAA TTT CAG AGA GAC	612	621	630	639	648
---	---	---	---	---	---	---
Y R S L P R D T S N W S N Q F Q R D						
657	AAT GCT CGC TCG TCT CTG AGT GCC AGT CAC CCA ATG GTG GGC AAG TGG CTG GAG	666	675	684	693	702
---	---	---	---	---	---	---
N A R S S L S A S H P M V G K W L E						
711	AAA CAA GAA CAG GAT GAG GAT GGG ACA GAA GAG GAT AAC AGT CGT GTT GAA CCT	720	729	738	747	756
---	---	---	---	---	---	---
K Q E Q D D E D G T E E D N S R V E P						
765	GTT GGA CAT GCT GAC ACG GGT TTG GAG CAT ATA CCC AAC TTT TCT CTG GAT GAT	774	783	792	801	810
---	---	---	---	---	---	---
V G H A D T G L E H I P N F S L D D						

FIGURE 2C

819	828	837	846	855	864
ATG GTA AAG CTC GTA GAA GTC CCC AAC GAT GGA GGG CCT CTG GGA ATC CAT GTA					
M V K L V E V P N D G G P L G I H V					
873	882	891	900	909	918
GTG CCT TTC AGT GCT CGA GGC GGC AGA ACC CTG GGG TTA TTA GTA AAA CGA TTG					
V P F S A R G G R T L G L L V K R L					
927	936	945	954	963	972
GAG AAA GGT GGT AAA GCT GAA CAT GAA AAT CTT TTT CGT GAG AAT GAT TGC ATT					
E K G G K A E H E N L F R E N D C I					
981	990	999	1008	1017	1026
GTC AGG ATT AAT GAT GGC GAC CTT CGA AAT AGA AGA TTT GAA CAA GCA CAA CAT					
V R I N D G D L R N R R R F E Q A Q H					
1035	1044	1053	1062	1071	1080
ATG TTT CGC CAA GCC ATG CGT ACA CCC ATC ATT TGG TTC CAT GTG GTT CCT GCA					
M F R Q A M R T P I I W F H V P A					

FIGURE 2D

1089	1098	1107	1116	1125	1134
GCA AAT AAA GAG CAG TAT GAA CAA CTA TCC CAA AGT GAG AAG AAC AAT TAC TAT					
---	---	---	---	---	---
A N K E Q Y E Q L S Q S E K N N Y Y					
1143	1152	1161	1170	1179	1188
TCA AGC CGT TTT AGC CCT GAC AGC CAG TAT ATT GAC AAC AGG AGT GTG AAC AGT					
---	---	---	---	---	---
S S R F S P D S Q Y I D N R S V N S					
1197	1206	1215	1224	1233	1242
GCA GGG CTT CAC ACG GTG CAG AGA GCA CCC CGA CTG AAC CAC CCG CCT GAG CAG					
---	---	---	---	---	---
A G L H T V Q R A P R L N H P P E Q					
1251	1260	1269	1278	1287	1296
ATA GAC TCT CAC TCA AGA CTA CCT CAT AGC GCA CAC CCC TCG GGA AAA CCA CCA					
---	---	---	---	---	---
I D S H S R L P H S A H P S G K P P					
1305	1314	1323	1332	1341	1350
TCC GCT CCA GCC TCG GCA CCT CAG AAT GTA TTT AGT ACG ACT GTA AGC AGT GGT					
---	---	---	---	---	---
S A P A S A P Q N V F S T T V S S G					

FIGURE 2E

1359	TAT	AAC	ACC	AAA	AAA	ATA	GGC	AAG	AGG	CTT	AAT	ATC	CAG	CTT	AAG	AAA	GGT	ACA	1404
	Y	N	T	K	K	I	G	K	R	L	N	I	Q	L	K	K	G	T	
1413	GAA	GGT	TTG	GGA	TTC	AGC	ATC	ACT	TCC	AGA	GAT	GTA	ACA	ATA	GGT	GGC	TCA	GCT	1458
	E	G	L	G	F	S	I	T	S	R	D	V	T	I	G	G	S	A	
1467	CCA	ATC	TAT	GTG	AAA	AAC	ATT	CTC	CCC	CGG	GGG	GCG	GCC	ATT	CAG	GAT	GGC	CGA	1512
	P	I	Y	V	K	N	I	L	P	R	G	A	A	I	Q	D	G	R	
1521	CTT	AAG	GCA	GGA	GAC	AGA	CTT	ATA	GAG	GTA	AAT	GGA	GTA	GAT	TTA	GTG	GGC	AAA	1566
	L	K	A	G	D	R	L	I	E	V	N	G	V	D	L	V	G	K	
1575	TCC	CAA	GAG	GAA	GTT	GTT	TCG	CTG	TTG	AGA	AGC	ACC	AAG	ATG	GAA	GGA	ACT	GTG	1620
	S	Q	E	E	V	V	S	L	L	R	S	T	K	M	E	G	T	V	

FIGURE 2F

1629	AGC	CTT	CTG	GTC	TTT	CGC	CAG	GAA	GAC	GCC	TTC	CAC	CCA	AGG	GAA	CTG	AAT	GCA	1674
	S	L	L	V	F	R	Q	E	D	A	F	H	P	R	E	L	N	A	
1683	GAG	CCA	AGC	CAG	ATG	CAG	ATT	CCA	AAA	GAA	ACG	AAA	GCA	GAA	GAT	GAG	GAT	ATT	1728
	E	P	S	Q	M	Q	I	P	K	E	T	K	A	E	D	E	D	I	
1737	GTT	CTT	ACA	CCT	GAT	GGC	ACC	AGG	GAA	TTT	CTG	ACA	TTT	GAA	GTC	CCA	CTT	AAT	1782
	V	L	T	P	D	G	T	R	E	F	L	T	F	E	V	P	L	N	
1791	GAT	TCA	GGA	TCT	GCA	GGC	CTT	GGT	GTC	AGT	GTC	AAA	GGT	AAC	CGG	TCA	AAA	GAG	1836
	D	S	G	S	A	G	L	G	V	S	V	K	G	N	R	S	K	E	
1845	AAC	CAC	GCA	GAT	TTG	GGA	ATC	TTT	GTC	AAG	TCC	ATT	ATT	AAT	GGA	GGA	GCA	GCA	1890
	N	H	A	D	L	G	I	F	V	K	S	I	I	N	G	G	A	A	

FIGURE 2G

1899	1908	1917	1926	1935	1944
TCT AAA GAT GGA AGG CTT CGG GTG AAT GAT CAA CTG ATA GCA GTA AAT GGA GAA					
---	---	---	---	---	---
S K D G R L R V N D Q L I A V N G E					
1953	1962	1971	1980	1989	1998
TCC CTG TTG GGC AAG ACA AAC CAA GAT GCC ATG GAA ACC CTA AGA AGG TCT ATG					
---	---	---	---	---	---
S L L G K T N Q D A M E T L R R S M					
2007	2016	2025	2034	2043	2052
TCT ACT GAA GGC AAT AAA CGA GGA ATG ATC CAG CTT ATT GTT GCA AGG AGA ATA					
---	---	---	---	---	---
S T E G N K R G M I Q L I V A R R I					
2061	2070	2079	2088	2097	2106
AGC AAG TGC AAT GAG CTG AAG TCA CCT GGG AGC CCC CCT GGA CCT GAG CTG CCC					
---	---	---	---	---	---
S K C N E L K S P G S P P G P E L P					
2115	2124	2133	2142	2151	2160
ATT GAA ACA GCG TTG GAT GAT AGA GAA CGA AGA ATT TCC CAT TCC CTC TAC AGT					
---	---	---	---	---	---
I E T A L D D R E R R I S H S L Y S					

FIGURE 2H

2169	2178	2187	2196	2205	2214
GGG ATT GAG GGG CTT GAT GAA TCG CCC AGC AGA AAT GCT GCC CTC AGT AGG ATA					
---	---	---	---	---	---
G I E G L D E S P S R N A A L S R I					
2223	2232	2241	2250	2259	2268
ATG GGT GAG TCA GGT AAA TAC CAG CTG TCC CCT ACA GTG AAT ATG CCC CAA GAT					
---	---	---	---	---	---
M G E S G K Y Q L S P T V N M P Q D					
2277	2286	2295	2304	2313	2322
GAC ACT GTC ATT ATA GAA GAT GAC AGG TTG CCA GTG CTT CCT CCA CAT CTC TCT					
---	---	---	---	---	---
D T V I I E D D R L P V L P P H L S					
2331	2340	2349	2358	2367	2376
GAC CAG TCC TCT TCC AGC TCC CAT GAT GAT GTG GGG TTT GTG ACG GCA GAT GCT					
---	---	---	---	---	---
D Q S S S S H D D V G F V T A D A					
2385	2394	2403	2412	2421	2430
GGT ACT TGG GCC AAG GCT GCA ATC AGT GAT TCA GCC GAC TGC TCT TTG AGT CCA					
---	---	---	---	---	---
G T W A K A A I S D S A D C S L S P					

FIGURE 2I

2439	2448	2457	2466	2475	2484
GAT GTT GAT CCA GTT CTT GCT TTT CAA CGA GAA GGA TTT GGA CGT CAG AGT ATG					
---	---	---	---	---	---
D V D P V L A F Q R E G F G R Q S M					
2493	2502	2511	2520	2529	2538
TCA GAA AAA CGC ACA AAG CAA TTT TCA GAT GCC AGT CAA TTG GAT TTC GTT AAA					
---	---	---	---	---	---
S E K R T K Q F S D A S Q L D F V K					
2547	2556	2565	2574	2583	2592
ACA CGA AAA TCA AAA AGC ATG GAT TTA GGT ATA GCT GAC GAG ACT AAA CTC AAT					
---	---	---	---	---	---
T R K S K S M D L G I A D E T K L N					
2601	2610	2619	2628	2637	2646
ACA GTG GAT GAC CAG AAA GCA GGT TCT CCC AGC AGA GAT GTG GGT CCT TCC CTG					
---	---	---	---	---	---
T V D D Q K A G S P S R D V G P S L					
2655	2664	2673	2682	2691	2700
GGT CTG AAG AAG TCA AGC TCG TTG GAG AGT CTG CAG ACC GCA GTT GCC GAG GTG					
---	---	---	---	---	---
G L K K S S S L E S L Q T A V A E V					

FIGURE 2J

2709	2718	2727	2736	2745	2754
ACT TTG AAT GGG GAT ATT CCT TTC CAT CGT CCA CGG CCG CGG ATA ATC AGA GGC					
---	---	---	---	---	---
T L N G D I P F H R P R P R I I R G					
2763	2772	2781	2790	2799	2808
AGG GGA TGC AAT GAG AGC TTC AGA GCT GCC ATC GAC AAA TCT TAT GAT AAA CCC					
---	---	---	---	---	---
R G C N E S F R A A I D K S Y D K P					
2817	2826	2835	2844	2853	2862
GCG GTA GAT GAT GAT GAA GGC ATG GAG ACC TTG GAA GAA GAC ACA GAA GAA					
---	---	---	---	---	---
A V D D D D E G M E T L E E D T E E					
2871	2880	2889	2898	2907	2916
AGT TCA AGA TCA GGG AGA GAG TCT GTA TCC ACA GCC AGT GAT CAG CCT TCC CAC					
---	---	---	---	---	---
S S R S G R E S V S T A S D Q P S H					
2925	2934	2943	2952	2961	2970
TCT CTG GAG AGA CAA ATG AAT GGA AAC CAA GAG AAA GGT GAT AAG ACT GAT AGA					
---	---	---	---	---	---
S L E R Q M N G N Q E K G D K T D R					

FIGURE 2K

3249	GCT	GAA	ATT	CAA	GAT	TTT	CAT	CGG	ACA	TTT	GGC	TGT	GAT	GAT	GAG	TTA	ATG	TAT	3294
	A	E	I	Q	D	F	H	R	T	F	G	C	D	D	E	L	M	Y	
3303	GGG	GGA	GTT	TCT	TAT	TAT	GAA	GGT	TCC	ATG	GCT	CTC	AAC	GCT	AGA	CCT	CAG	AGC	3348
	G	G	V	S	S	Y	E	G	S	M	A	L	N	A	R	P	Q	S	
3357	CCA	CGA	GAA	GGG	CAT	ATG	ATG	GAT	GCT	TTG	TAT	GCC	CAA	GTC	AAG	AAG	CCG	CGG	3402
	P	R	E	G	H	M	M	D	A	L	Y	A	Q	V	K	K	P	R	
3411	AAT	TCC	AAA	CCC	TCA	CCT	GTA	GAC	AGT	AAC	AGA	TCA	ACT	CCT	AGC	AAT	CAT	GAT	3456
	N	S	K	P	S	P	V	D	S	N	R	S	T	P	S	N	H	D	
3465	CGG	ATA	CAG	CGT	CTG	AGG	CAA	GAA	TTT	CAG	CAA	GCA	AAG	CAA	GAT	GAA	GAT	GTA	3510
	R	I	Q	R	L	R	Q	E	F	Q	Q	A	K	Q	D	E	D	V	

3519	3528	3537	3546	3555	3564
GAA GAT CGT CGG CGG ACC TAT AGT TTT GAG CAA CCC TGG CCG AAC GCA CGG CCG					
---	---	---	---	---	---
E D R R R T Y S F E Q P W P N A R P					
3573	3582	3591	3600	3609	3618
GCG ACG CAG AGC GGG CGA CAC TCG GTG TCC GTG GAG GTG CAG ATG CAG CGG CAG					
---	---	---	---	---	---
A T Q S G R H S V S V E V Q M Q R Q					
3627	3636	3645	3654	3663	3672
GCG CAG GAG GAG CGC GAG AGC TCC CAG CAG GCC CAG CGC CAG TAC AGC TCT CTG					
---	---	---	---	---	---
R Q E E R E S S Q Q A Q R Q Y S S L					
3681	3690	3699	3708	3717	3726
CCT CGG CAA AGC AGG AAA AAT GCC AGC TCG GTC TCC CAG GAC TCT TGG GAG CAG					
---	---	---	---	---	---
P R Q S R K N A S S V S Q D S W E Q					
3735	3744	3753	3762	3771	3780
AAC TAC TCC CCT GGG GAA GGC TTC CAG AGT GCC AAA GAG AAC CCC AGG TAC TCC					
---	---	---	---	---	---
N Y S P G E G G F Q S A K E N P R Y S					

FIGURE 2N

3789	3798	3807	3816	3825	3834
AGC TAC CAA GGC TCC AGG AAC GGC TAC CTG GGA GGA CAT GGC TTC AAC GCC AGG					
---	---	---	---	---	---
S Y Q G S R N G Y L G G H G F N A R					
3843	3852	3861	3870	3879	3888
GTC ATG CTG GAA ACT CAG GAG CTC CTT CGC CAG GAA CAG AGG CGG AAG GAG CAG					
---	---	---	---	---	---
V M L E T Q E L L R Q E Q R R K E Q					
3897	3906	3915	3924	3933	3942
CAG ATG AAG AAG CAG CCT CCT TCC GAG GGG CCC AGC AAC TAT GAC TCG TAT AAG					
---	---	---	---	---	---
Q M K K Q P P S E G P S N Y D S Y K					
3951	3960	3969	3978	3987	3996
AAA GTC CAG GAC CCC AGT TAC GCC CCT CCC AAG GGG CCC TTC CGG CAA GAT GTG					
---	---	---	---	---	---
K V Q D P S Y A P P K G P F R Q D V					
4005	4014	4023	4032	4041	4050
CCC CCC TCC CCT TCT CAG GTT GCG AGG CTG AAC AGA CTT CAG ACT CCT GAG AAA					
---	---	---	---	---	---
P P S P S Q V A R L L N R L Q T P E K					

FIGURE 20

4059	4068	4077	4086	4095	4104
GGG AGG CCC TTC TAT TCC TGA GCA CGC AAA TAA CGG ATG CTT CAT GTC GCG CAA					
---	---	---	---	---	---
G R P F Y S					
4113	4122	4131	4140	4149	4158
TAA AAG ACA TTT TCC TAT TCC TAT GAA GAC TTG TAT TTT GGG AGT TTT TTT AAA ACC TCG					
4167	4176	4185	4194	4203	4212
ATG GTA CTA TGG AGT ATT TCT GTT GGT ATC AGT GCC TTT AAG CGG TGT AGG					
4221	4230	4239	4248	4257	4266
CAA AGA AAT GGA AGG CCT TAA TGT CTT TGC CAC TAT GTC TCA AGT GTC TGT TTC					
4275	4284	4293	4302	4311	4320
ATG GAA GGA TTT CCC ACC CTG TGA CAA TCA TCT GTT TGA GGT GTT CAT ATG CTC					
4329	4338	4347	4356	4365	4374
TGC GCC TCT CCA CAG TAC CAG GAA TCT CGG CCC TAC TCA TGA GTT GTC CGC GGC					
4383	4392	4401	4410	4419	4428
TTG GTT GTA ACA TCC CTG CAC CAC TTG CAG TGA CAA ATT CAC CTG AAG TGG AGG					
4437	4446	4455	4464	4473	4482
ATG ACG TGC GGC CCT GTT TCT CCC TCT AAG TTC TCT TAG CTA TGG GAT GAC ATC					
4491	4500	4509	4518	4527	4536
TTA GTC TCT GGT GGA GGA AAA GTG GGC GAC ATA CAC CAA AAA TTG GGG CTT TCT					

FIGURE 2P

4545	4554	4563	4572	4581	4590
GGT ACT TCA CAG CAC AGC CAT TTG TCG TAC TTT GTC ATC ACT GTG GTT TTC TCT					
4599	4608	4617	4626	4635	4644
TTC CTT TCT CAG CTC TTT GTG ACG GGA GAG TCG GTC ATC CTA TTA CAG AAG CTA					
4653	4662	4671	4680	4689	4698
AGC CAT AGT CCA ACA TTG TTT GGT CAC CAT GGG GGT CCT TTT GTA ACT GCC TTA					
4707	4716	4725	4734	4743	4752
TGA CTC AAC ATT ACC AAT AAA GTG ATG ATC CTG GTC TGC GTT TAT ACA TAC GCT					
4761	4770	4779	4788	4797	4806
TGT TCG GTC CTG TTC CTG ACA CGT GGG TTG AGT CAC CAC AGC TCT GTG TGG GGA					
4815	4824	4833	4842	4851	4860
ACG TGG GAG ACA GGA GTG GCT CCT GCC GGG GGA AGC TGG GCC CAT TGG CCC					
4869	4878	4887	4896	4905	4914
TGT GTC TAT CAT GAG GGG AGA GCT AAG AAA GAA ATT CTC CTA GGA AGA GCT CAT					
4923	4932	4941	4950	4959	4968
GGC CCA GTA CAT CCT AGT AAT TAT TTT AAT TAG TTT TTG TTC TGA CAG CTT GTC					
4977	4986	4995	5004	5013	5022
AGG AAG GGC ACA GAA TGG GAC AGA GAT AAA CCA GAC AGT CAT TTT GAT CTG CTC					

FIGURE 2Q

5031	5040	5049	5058	5067	5076
TCT ACG GTT TTT CAA GTC AGA GGC AAT TGA TGC TTG TCT AAT GCA TCC ACA CAC					
5085	5094	5103	5112	5121	5130
TGC ATG TCT GAC TGG CGA TGC CAC GCT CCT AAG TAG TTC TGC CAT GAA ACA TAA					
5139	5148	5157	5166	5175	5184
AAG ACA AAG GAA AAG CCG TTA CAC ATC ACA CAG AGA ACA TTT TCG GGT CCC ACA					
5193	5202	5211	5220	5229	5238
GCG GTG GTG GCA GGA AGC TCA CTC TCG CGT CAG TAT TAG AGT GTG TGT GTG GGT					
5247	5256	5265	5274	5283	5292
CTC GGG GAT CTC GGT GGC TCC CAT CTT CCT TCA TTG TTC TGA ACA TCC TGT ATT					
5301	5310	5319	5328	5337	5346
GTA AAC CAT GGC TGG GGT GCT AAA GTG CCT GTG AAT CCC GAT GTG GAA AAA GCT					
5355	5364	5373	5382	5391	5400
GGA GGT GAA AGC TCA GCA TAC CAT GTA TTT ACT TTA AAA ACA GAA AAA AAG ACA					
5409	5418	5427	5436	5445	5454
TGT ATG GAT ATG TCT ATT TTT TTT TTA TTG GCA CAT TGT ATT TTT GTG TTG ACT					
5463	5472	5481	5490	5499	5508
TGT TTT TAG AAA TGA TGT GTC CAC ACA CGT ACC CGT GTC TCT TCT GCA TTT CTG					

FIGURE 2R

5517	5526	5535	5544	5553	5562
TGT CAT GGT TCT TCT GTT TCT TAA TCA CGT GCG GCG GTG TCT AAG TGG TGT TAC CAG					
5571	5580	5589	5598	5607	5616
TGT ACG CGC AGT GAC CTT GGA TGA CAG TGG CTC TTT CTC ACA GCC TCC CCT GAG					
5625	5634	5643	5652	5661	5670
CTG TGA GAA ACA GCT TTC TCT GTA CAT ATG CAA CTC CTA ATA AAA GGC ATA TTT					
5679	5688				
CTT CCT GTT AAA AAA AAA A 3'					

the 1990s, the number of people in the world who are undernourished has declined from 1.1 billion to 800 million. The number of people who are malnourished has declined from 1.5 billion to 1 billion. The number of people who are obese has increased from 100 million to 300 million. The number of people who are overweight has increased from 100 million to 300 million. The number of people who are undernourished has declined from 1.1 billion to 800 million. The number of people who are malnourished has declined from 1.5 billion to 1 billion. The number of people who are obese has increased from 100 million to 300 million. The number of people who are overweight has increased from 100 million to 300 million.

1	M	K	V	T	V	C	F	G	R	T	G	I	V	V	P	C	K	E	G	Q	L	R	V	G	E	L	T	Q	Q	A	1555118
1	M	K	V	T	V	C	F	G	R	T	R	V	V	V	P	C	G	D	G	H	M	K	V	F	S	L	I	Q	Q	A	2582063
1	M	K	V	T	V	C	F	G	R	T	R	V	V	V	P	C	G	D	G	R	M	K	V	F	S	L	I	Q	Q	A	g3868778
1	M	K	V	T	V	C	F	G	R	T	R	V	V	V	P	C	G	D	G	H	M	K	V	F	S	L	I	Q	Q	A	g8037915
31	L	Q	R	Y	L	K	T	R	E	K	G	P	G	Y	W	V	K	I	H	L	E	Y	T	D	G	G	I	L	D	1555118	
31	V	T	R	Y	R	K	A	I	A	K	D	P	N	Y	W	I	Q	V	H	R	L	E	H	G	D	G	I	L	D	2582063	
31	V	T	R	Y	R	K	A	V	A	K	D	P	N	Y	W	I	Q	V	H	R	L	E	H	G	D	G	I	L	D	g3868778	
31	V	T	R	Y	R	K	A	I	A	K	D	P	N	Y	W	I	Q	V	H	R	L	E	H	G	D	G	I	L	D	g8037915	
61	P	D	D	V	L	A	D	V	V	E	D	K	D	K	L	I	A	V	F	E	Q	E	P	L	H	K	I	E	S	1555118	
61	L	D	D	I	L	C	D	V	A	D	D	K	D	R	L	V	A	V	F	D	E	Q	D	P	H	H	G	D	G	2582063	
61	L	D	D	I	L	C	D	V	A	D	D	K	D	R	L	V	A	V	F	D	E	Q	D	P	H	H	G	D	G	g3868778	
61	L	D	D	I	L	C	D	V	A	D	D	K	D	R	L	V	A	V	F	D	E	Q	D	P	H	H	G	D	G	g8037915	
91	P	S	G	N	P	A	D	R	Q	S	P	D	A	F	E	T	E	V	A	A	Q	-	L	A	A	F	K	P	-	-	1555118
91	T	S	A	S	S	T	G	T	Q	S	P	E	I	F	G	S	E	L	G	T	N	N	V	S	A	F	Q	P	Y	Q	2582063
91	T	S	A	S	S	T	G	T	Q	S	P	E	I	F	G	S	E	L	G	T	N	N	V	S	A	F	R	P	Y	Q	g3868778
91	T	S	A	S	S	T	G	T	Q	S	P	E	I	F	G	S	E	L	G	T	N	N	V	S	A	F	Q	P	Y	Q	g8037915
118	I	G	G	E	I	E	V	T	P	S	A	L	K	L	G	T	P	L	L	V	R	R	S	S	D	P	V	-	-	-	1555118
121	A	T	S	E	I	E	V	T	P	S	V	L	R	A	N	M	P	L	H	V	R	R	S	S	D	P	A	L	I	G	2582063
121	T	T	S	E	I	E	V	T	P	S	V	L	R	A	N	M	P	L	H	V	R	R	S	S	D	P	A	L	T	G	g3868778
121	A	T	S	E	I	E	V	T	P	S	V	L	R	A	N	M	P	L	H	V	R	R	S	S	D	P	A	L	I	G	g8037915

FIGURE 3A

145	- - - - -	P G P	A D T Q	S A S H P G G Q S L	1555118
151	L S T S V S D S N F S S E E P S R K N P T R W S T T A G F L	2582063			
151	L S T S V S D N N F S S E E P S R K N P T R W S T T A G F L	93868778			
151	L S T S V S D S N F S S E E P S R K N P T R W S T T A G F L	98037915			
164	K L V V P D S T - - - - -	1555118			
181	K Q N T A G S P K T C D R K K D E N Y R S L P R D T S N W S	2582063			
181	K Q N T T G S P K T C D R K K D E N Y R S L P R D P S W S	93868778			
181	K Q N T A G S P K T C D R K - - - - -	98037915			
172	- - - Q N L E D R E V L N G V Q T E L - - - L T S P R T K D	1555118			
211	N Q F Q R D N A R S S L S A S H P M V G K W L E K Q E Q D E	2582063			
211	N Q F Q R D N A R S S L S A S H P M V D R W L E K Q E Q D E	93868778			
195	- - - - -	98037915			
196	- - - - -	1555118			
241	D G T E E D N S R V E P V G H A D T G L E H I P N F S L D D	2582063			
241	E G T E E D S S R V E P V G H A D T G L E N M P N F S L D D	93868778			
197	D G T E E D N S R V E P V G H A D T G L E H I P N F S L D D	98037915			
200	M T R T V E I S G E G G P L G I H V V P F F S S L S G R I L	1555118			
271	M V K L V E V P N D G G P L G I H V V P F F - S A R G G R T L	2582063			
271	M V K L V Q V P N D G G P L G I H V V P F F - S A R G G R T L	93868778			
227	M V K L V E V P N D G G P L G I H V V P F F - S A R G G R T L	98037915			

FIGURE 3B

230	G	L	F	I	R	G	I	E	D	N	S	R	S	K	R	E	G	L	F	H	E	N	E	C	I	V	K	I	N	N	1555118	
300	G	L	L	V	K	R	L	E	K	G	G	K	A	E	H	E	N	L	F	R	E	N	D	C	I	V	R	I	N	D	2582063	
300	G	L	L	V	K	R	L	E	K	G	G	K	A	E	Q	E	N	L	F	H	E	N	D	C	I	V	R	I	N	D	g3868778	
256	G	L	L	V	K	R	L	E	K	G	G	K	A	E	H	E	N	L	F	R	E	N	D	C	I	V	R	I	N	D	g8037915	
260	V	D	L	V	D	K	T	F	A	Q	A	Q	D	V	F	R	Q	A	M	K	S	P	S	V	L	L	H	V	L	P	1555118	
330	G	D	L	R	N	R	R	F	E	Q	A	Q	H	M	F	R	Q	A	M	R	T	P	I	I	W	F	H	V	V	P	2582063	
330	G	D	L	R	N	R	R	F	E	Q	A	Q	H	M	F	R	Q	A	M	R	A	R	V	I	W	F	H	V	V	P	g3868778	
286	G	D	L	R	N	R	R	F	E	Q	A	Q	H	M	F	R	Q	A	M	R	T	P	I	I	W	F	H	V	V	P	g8037915	
290	P	Q	N	R	E	Q	Y	E	K	S	V	I	G	S	L	N	I	F	G	N	N	-	-	-	D	G	V	L	K	1555118		
360	A	A	N	K	E	Q	Y	E	Q	L	S	Q	S	E	K	N	N	Y	Y	S	S	R	F	S	P	D	S	Q	Y	I	2582063	
360	A	A	N	K	E	Q	Y	E	Q	L	S	Q	R	E	M	N	N	Y	S	P	G	R	F	S	P	D	S	H	C	V	g3868778	
316	A	A	N	K	E	Q	Y	E	Q	L	S	Q	S	E	K	N	N	Y	Y	S	S	R	F	S	P	D	S	Q	Y	I	g8037915	
316	T	K	V	P	P	P	V	H	G	K	S	G	L	K	T	A	N	L	T	G	T	D	S	P	E	T	D	A	S	A	1555118	
390	D	N	R	S	V	N	S	A	G	L	H	T	V	Q	R	A	P	R	L	N	H	P	P	E	Q	I	D	S	H	S	2582063	
390	A	N	R	S	V	A	N	N	A	P	Q	A	L	P	R	A	P	R	L	S	Q	P	P	E	Q	L	D	A	H	P	g3868778	
346	D	N	R	S	V	N	S	A	G	L	H	T	V	Q	R	A	P	R	L	N	H	P	P	E	Q	I	D	S	H	S	g8037915	
346	S	L	Q	Q	N	K	S	P	R	V	P	R	L	G	G	K	P	S	S	P	S	-	-	-	L	S	P	L	M	G	-	1555118
420	R	L	P	H	S	A	H	P	S	G	K	P	P	S	A	P	A	S	A	P	Q	N	V	F	S	T	T	V	S	S	2582063	
420	R	L	P	H	S	A	H	A	S	T	K	P	P	T	A	P	A	L	A	P	P	N	V	L	S	T	S	V	G	S	g3868778	
376	R	L	P	H	S	A	H	P	S	G	K	P	P	S	A	P	A	S	A	P	Q	N	V	F	S	T	T	V	S	S	g8037915	

FIGURE 3C

373	-	F	G	S	N	K	N	A	K	K	I	K	I	D	L	K	K	G	P	E	G	L	G	F	T	V	V	T	R	D	1555118
450	G	Y	N	T	K	K	I	G	K	R	L	N	I	Q	L	K	K	G	T	E	G	L	G	F	S	I	T	S	R	D	2582063
450	V	Y	N	T	K	R	V	G	K	R	L	N	I	Q	L	K	K	G	T	E	G	L	G	F	S	I	T	S	R	D	g3868778
406	G	Y	N	T	K	K	I	G	K	R	L	N	I	Q	L	K	K	G	T	E	G	L	G	F	S	I	T	S	R	D	g8037915
402	S	S	I	H	G	P	G	P	I	F	V	K	N	I	L	P	K	G	A	A	I	K	D	G	R	L	Q	S	G	D	1555118
480	V	T	I	G	G	S	A	P	I	Y	V	K	N	I	L	P	R	G	A	A	I	Q	D	G	R	L	K	A	G	D	2582063
480	V	T	I	G	G	S	A	P	I	Y	V	K	N	I	L	P	R	G	A	A	I	Q	D	G	R	L	K	A	G	D	g3868778
436	V	T	I	G	G	S	A	P	I	Y	V	K	N	I	L	P	R	G	A	A	I	Q	D	G	R	L	K	A	G	D	g8037915
432	R	I	L	E	V	N	G	R	D	V	T	G	R	T	Q	E	E	L	V	A	M	L	R	S	T	K	Q	G	E	T	1555118
510	R	L	I	E	V	N	G	V	D	L	V	G	K	S	Q	E	E	V	V	S	L	L	R	S	T	K	M	E	G	T	2582063
510	R	L	I	E	V	N	G	V	D	L	A	G	K	S	Q	E	E	V	V	S	L	L	R	S	T	K	M	E	G	T	g3868778
466	R	L	I	E	V	N	G	V	D	L	V	G	K	S	Q	E	E	V	V	S	L	L	R	S	T	K	M	E	G	T	g8037915
462	A	S	L	V	I	A	R	Q	E	G	H	F	L	P	R	E	L	K	G	E	P	D	C	C	A	L	S	L	E	T	1555118
540	V	S	L	L	V	F	R	Q	E	D	A	F	H	P	R	E	L	N	A	E	P	S	Q	M	Q	I	P	K	E	T	2582063
540	V	S	L	L	V	F	R	Q	E	E	A	F	H	P	R	E	M	N	A	E	P	S	Q	M	Q	S	P	K	E	T	g3868778
496	V	S	L	L	V	F	R	Q	E	D	A	F	H	P	R	E	L	-	-	-	-	-	-	-	-	-	-	-	-	-	g8037915
492	S	E	Q	-	-	-	-	-	-	-	-	-	-	-	-	-	-	L	T	F	E	I	P	L	N	D	S	G	S	A	1555118
570	K	A	E	D	E	D	I	V	L	T	P	D	G	T	R	E	F	L	T	F	E	V	P	L	N	D	S	G	S	A	2582063
570	K	A	E	D	E	D	I	V	L	T	P	D	G	T	R	E	F	L	T	F	E	V	P	L	N	D	S	G	S	A	g3868778
513	K	A	E	D	E	D	I	V	L	T	P	D	G	T	R	E	F	L	T	F	E	V	P	L	N	D	S	G	S	A	g8037915

FIGURE 3D

508	G	L	G	V	S	L	K	G	N	K	S	R	E	T	G	T	D	L	G	I	F	I	K	S	I	I	H	G	G	A	1555118
600	G	L	G	V	S	V	K	G	N	R	S	K	E	N	H	A	D	L	G	I	F	V	K	S	I	I	N	G	G	A	2582063
600	G	L	G	V	S	V	K	G	N	R	S	K	E	N	H	A	D	L	G	I	F	V	K	S	I	I	N	G	G	A	g3868778
543	G	L	G	V	S	V	K	G	N	R	S	K	E	N	H	A	D	L	G	I	F	V	K	S	I	I	N	G	G	A	g8037915
538	A	F	K	D	G	R	L	R	M	N	D	Q	L	I	A	V	N	G	E	S	L	L	G	K	S	N	H	E	A	M	1555118
630	A	S	K	D	G	R	L	R	V	N	D	Q	L	I	A	V	N	G	E	S	L	L	G	K	T	N	Q	D	A	M	2582063
630	A	S	K	D	G	R	L	R	V	N	D	Q	L	I	A	V	N	G	E	S	L	L	G	K	A	N	Q	E	A	M	g3868778
573	A	S	K	D	G	R	L	R	V	N	D	Q	L	I	A	V	N	G	E	S	L	L	G	K	T	N	Q	D	A	M	g8037915
568	E	T	L	R	R	P	M	S	M	E	G	N	I	R	G	M	I	Q	L	V	I	L	R	R	-	-	-	-	-	-	1555118
660	E	T	L	R	R	S	M	S	T	E	G	N	K	R	G	M	I	Q	L	I	V	A	R	R	I	S	K	C	N	E	2582063
660	E	T	L	R	R	S	M	S	T	E	G	N	K	R	G	M	I	Q	L	I	V	A	R	R	I	S	R	C	N	E	g3868778
603	E	T	L	R	R	S	M	S	T	E	G	N	K	R	G	M	I	Q	L	I	V	A	R	R	I	S	K	C	N	E	g8037915
592	-	-	-	-	-	-	-	-	-	P	E	R	P	M	E	D	P	-	A	E	C	G	A	F	S	K	P	C	F	E	1555118
690	L	K	S	P	G	S	P	P	G	P	E	L	P	I	E	T	A	L	D	D	R	E	R	R	I	S	H	S	L	Y	2582063
690	L	R	S	P	G	S	P	A	A	P	E	L	P	I	E	T	E	L	D	D	R	E	R	R	I	S	H	S	L	Y	g3868778
633	L	K	S	P	G	S	P	P	G	P	E	L	P	I	E	T	A	L	D	D	R	E	R	R	I	S	H	S	L	Y	g8037915
612	N	C	Q	N	A	V	T	T	S	R	R	N	D	N	S	I	L	H	P	L	G	T	C	S	P	Q	D	K	Q	K	1555118
720	S	G	I	E	G	L	D	E	S	P	S	R	N	A	A	L	S	R	I	M	G	E	S	G	K	Y	Q	L	S	P	2582063
720	S	G	I	E	G	L	D	E	S	P	T	R	N	A	A	L	S	R	I	M	G	E	S	G	K	C	Q	L	S	P	g3868778
663	S	G	I	E	G	L	D	E	S	P	S	R	N	A	A	L	S	R	I	M	G	-	-	-	K	Y	Q	L	S	P	g8037915

FIGURE 3E

642	G	L	L	P	N	D	G	W	A	E	S	E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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FIGURE 3F

757	V	R	-	K	N	D	L	P	F	H	R	P	R	P	H	M	V	R	G	R	G	C	N	E	S	F	R	A	A	I	1555118	
900	V	T	L	N	G	D	I	P	F	H	R	P	R	P	R	I	I	R	G	R	G	C	N	E	S	F	R	A	A	I	2582063	
900	V	T	L	N	G	N	I	P	F	H	R	P	R	P	R	I	I	R	G	R	G	C	N	E	S	F	R	A	A	I	g3868778	
810	V	T	L	N	G	D	I	P	F	H	R	P	R	P	R	I	I	R	G	R	G	C	N	E	S	F	R	A	A	I	g8037915	
786	D	K	S	Y	D	G	P	E	-	E	I	E	A	D	G	L	-	-	-	-	-	-	S	D	K	S	S	H	S	G	1555118	
930	D	K	S	Y	D	K	P	A	V	D	D	D	D	E	G	M	E	T	L	E	E	D	T	E	E	S	S	R	S	G	2582063	
930	D	K	S	Y	D	K	P	M	V	D	D	D	D	E	G	M	E	T	L	E	E	D	T	E	E	S	S	R	S	G	g3868778	
840	D	K	S	Y	D	K	P	A	V	D	D	D	D	E	G	M	E	T	L	E	E	D	T	E	E	S	S	R	S	G	g8037915	
809	Q	G	A	L	N	C	E	S	A	P	Q	G	N	S	E	L	E	D	M	-	-	-	-	-	-	-	-	-	-	-	E	1555118
960	R	E	S	V	S	T	A	S	D	Q	P	S	H	S	L	E	R	Q	M	N	G	N	Q	E	K	G	D	K	T	D	2582063	
960	R	E	S	V	S	T	S	S	D	Q	P	S	Y	S	L	E	R	Q	M	N	G	D	P	E	K	R	D	K	A	E	g3868778	
870	R	E	S	V	S	T	A	S	D	Q	P	S	H	S	L	E	R	Q	M	N	G	N	Q	E	K	G	D	K	T	D	g8037915	
829	N	K	A	R	K	V	K	K	T	K	E	K	E	K	K	E	K	G	K	L	K	V	K	E	-	-	-	-	-	1555118		
990	R	K	K	D	K	T	G	K	E	K	K	D	R	D	K	E	K	D	K	M	K	A	K	K	G	M	L	K	G	2582063		
990	K	K	K	D	K	A	G	K	D	K	K	D	R	E	K	E	K	D	K	L	K	A	K	K	G	M	L	K	G	g3868778		
900	R	K	K	D	K	T	G	K	E	K	K	D	R	D	K	E	K	D	K	M	K	A	K	K	G	M	L	K	G	g8037915		
854	-	-	-	-	-	-	-	-	-	K	K	R	K	E	N	E	D	-	-	-	-	-	-	-	-	-	-	-	-	1555118		
1020	L	G	D	M	F	R	F	G	K	H	R	K	D	D	K	I	E	K	T	G	K	I	K	I	Q	E	S	F	T	S	2582063	
1020	L	G	D	M	F	R	F	G	K	H	R	K	D	D	K	M	E	K	M	G	R	I	K	I	Q	D	S	F	T	S	g3868778	
930	L	G	D	M	F	R	F	G	K	H	R	K	D	D	K	I	E	K	T	G	K	I	K	I	Q	E	S	F	T	S	g8037915	

FIGURE 3G

[illegible]

FIGURE 3H

[illegible][illegible]

905	-	-	-	-	-	-	-	N	A	Y	-	-	G	S	Q	F	C	A	R	S	L	S	A	E	A	E	L	F	-	1555118	
1260	S	S	Y	Q	G	S	R	N	G	Y	L	G	G	H	G	F	N	A	R	V	M	-	L	E	T	Q	E	L	L	R	2582063
1258	S	S	Y	Q	G	S	R	N	G	Y	L	G	G	H	G	F	N	A	R	V	M	-	L	E	T	Q	E	L	L	R	93868778
1170	S	S	Y	Q	G	S	R	N	G	Y	L	G	G	H	G	F	N	A	R	V	M	-	L	E	T	Q	E	L	L	R	98037915

925	- - - - -	Q E Q R R K E Q Q M K K Q P P S E G P S N Y D S Y K K V Q D	G	1555118
1289	Q E Q R R K E Q Q L K K Q P P A D G V - - - - -	2582063		
1287	Q E Q R R K E Q Q M K K Q P P S E G P S N Y D S Y K K V Q D	g3868778		
1199	Q E Q R R K E Q Q M K K Q P P S E G P S N Y D S Y K K V Q D	q8037915		

[illegible]

FIGURE 31

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934	-	-	-	-	-	L	S
1349	E	K	G	R	P	F	Y
1330	E	K	G	R	P	F	Y
1259	E	K	G	R	P	F	Y

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2582063
g3868778
g8037915

FIGURE 3J